Jacobi (A.)

On Masturbation and Hysteria in Young Children.

REMARKS BEFORE THE MEDICAL JOURNAL ASSOCIATION OF N. Y., IN NOVEMBER, 1875.

BY

A. JACOBI, M.D.,

Clinical Professor of Diseases of Children, College of Physicians and Surgeons, N. Y.

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TO THE

MEMBERS OF THE SECTION FOR DISEASES OF CHILDREN

OF THE

"GESELLSCHAFT DEUTSCHER NATURFORSCHER UND ÆRZTE"

OF

INSBRUCK, 1869,

AND OF

HAMBURG, 1876.

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Greater accuracy of observation, and increasing knowledge of a large number of physiological facts have, of late years, had a peculiar influence on the current pathological views concerning the nervous system. More than ever, local and circumscribed causes have been sought for, and found, for distant or general nervous symptoms; and the tendency to localize disease—the great achievement in modern diagnostics—has, in my opinion, contributed much to develop the disposition on the part of medical men, to overlook general causes over an actual or alleged local anomaly. I am afraid that in many cases the charm of positiveness has given rise to serious mistakes. For instance, I believe that the doctrine of reflex spasms and particularly that of reflex paralysis will be greatly reduced in influence when the cases will be more thoroughly studied. This class of cases has been recruited principally from nerve affections connected with diseases of the genito-urinary organs. A number of years ago the cases of "reflex paralysis" depending on a disease of the kidneys were quite numerous indeed. Since they were carefully studied on the post mortem table, it grew evident that the consecutive nervous symptoms resulted from the direct contiguous transmission of the morbid process along the nerves upwards until it reached the spinal cord.

Thus the diagnosis of reflex paralysis had to be changed into that of an ascending neuritis and myelitis. As the medical mind cannot be satisfied until all the links between cause and effect are clearly seen, we ought to take exception to the readiness with which nervous symptoms are apparently explained. If there is in this connection any subject in regard to which I still

—in spite of the vigorous and sagacious efforts of such observers as Drs. L. A. Sayre and F. N. Otis—hesitate to fully accept their views, it is the frequency of (neuralgic, spastic and) paralytic symptoms depending upon phimosis.[1] But lately (*Medical Record*, Oct. 16th, 1875), Dr. J. H. Hunt related such a "case of partial paralysis from reflex action caused by adherent prepuce," in which, I must admit, I do not find, upon close observation, the proof of the postulation set forth in the title of the paper. The patient was a boy of six years, with a peculiar staggering walk, who seemed unable to properly control the lower extremities, and therefore was subject to frequent falls. He was nervous, and exhibited a twitching of the muscles of the face and extremities. His penis was found erected. He started and screamed in his sleep. The tongue, in the attempt of protruding, rolled about in the mouth. Articulation and intellect were below the average, in fact the boy was considered "idiotic" in the neighborhood. After circumcision, improvement took place rapidly.

The case yields but a few points. The boy's intellect was below the average, so that people thought him "idiotic." Besides, the child suffered from St. Vitus' dance, in which all the voluntary muscles participated, according to the above history. If there is any sickness, where a child of six years can make the impression of stupidity or idiocy, it is chorea minor, with its utter want of control over locomotion or articulation, and its emotional aberrations. Thus nothing, perhaps, remains except a case of protracted chorea, which "improved rapidly after circumcision." I ought not to go into a further criticism of the case, but I must say that no attempt has been made to explain the chorea by its habitual causes, and not even a statement is made of the condition of the heart, or of the spine, or concerning the previous occurrence, or non-occurrence, of acute articular rheumatism, or of the habit of masturbation so easily contracted when the phimosis is marked enough to prove an annoyance and irritation, and frequently given up when the source of constant irritation has been removed.

[1] C. Mauriac (Étude sur les neuralgies symptomatiques de l'orchi-épididymite blennorrhagique, Paris, 1870) claims—*but admits no more*—that "no less than four per cent. have reflex *neuralgia*, spinal, lumbo-abdominal, intercostal, sciatic, crural or visceral."

It is this habit of masturbation in the infant and child, to which I here desire to draw attention. To what extent it is practised in more advanced years, and how it interferes with a robust physical, mental and moral development of adolescence, is but too well known to both the physician and the pedagogue. But it has often appeared to me that its frequent occurrence in the quite young is by no means fully appreciated. There are some cases in which the diagnosis can be made from the condition of the parts when suspicion has been aroused. Tumefaction of prepuce and glans penis, and redness and œdematous appearance of the former, swelling of the labia majora, redness of the introitus vaginæ, moisture of the labia and vagina from over-secretion of the glands of Bartholin and the muciparous glands surrounding the urethra, are sometimes conclusive, when orgastic excitement has been observed. But these cases are by no means very frequent. Accidental or morbid swelling of the parts, and over-secretion from other causes may obscure the diagnosis. The majority of diagnoses can be made from careful observation of the child on the part of its attendants. A girl of three years was sent by a medical friend, because of a peculiar form of slight convulsive affections which were reported by the mother to have lasted a considerable time. These attacks would come in irregular intervals, frequently when the child was playing upon the floor or crouched upon a chair. Redness in the face and slight twitching about the eyes, with a deep sigh now and then, were all the symptoms enumerated. The child was well built, pale, the face was a little bloated. There was no history of a single violent eclamptic attack, or of any previous disease, or of premature teething and ossification of the cranial sutures and fontanelles, no history of epilepsy in the family, no effect of vermifuges and sedatives which had been administered. But for a long time the baby had lost her former spirits, was not noisy, but rather peevish and listless, alternately. A few questions and answers sufficed to convince me of the presence of masturbation in the little girl. She never had an attack of any kind when asleep. She never had one when walking about, or when playing and tossing about. She always had them when sitting down. She was very apt to keep her thighs closely joined, or to cross her legs. She moved and rubbed her limbs violently, got purple in the face,

began to perspire, to twitch about her eyes, which often looked excited, and lean back exhausted, sighing, or breathing hurriedly. To insure the diagnosis, the temperature of the rectum was taken and found normal; the urine examined, and no albumen found. Such cases are by no means rare. A number of them have been observed by me, which exhibited the same symptoms to a greater or lesser degree. Local changes of the parts are sometimes absent, although the habit be of long duration. The consequences, however, as far as general health is concerned are (cæteris paribus) the same. Amongst the prominent symptoms, beside the general expression of anæmia, and bloatedness, I ought to mention the change of temper. Not infrequently have I been puzzled about the presence of either masturbation or general anæmia from other causes, or premonitory symptoms of meningitis. The children are quiet, morose, fretful, peevish, sleep restlessly, or sometimes too soundly; appetite variable; bowels often constipated; pulse sometimes a little accelerated, frequently slow, and not rarely irregular; expression of headache round their brows; skin sometimes very dry, flabby, and lifeless, sometimes inclined to perspiration, sometimes shining with accumulated sebum. In children of from six to eight years I have now and then met with comedones, as in the adolescent, in whom they are a frequent accompaniment of masturbation.

A little boy of my acquaintance had frequently been noticed suddenly to leave his toys, walk through the room dreamily, sit down under the chandelier, stare upwards and commence a kneading exercise—by means of his two little fists—directed against his privates, which his nurse thought very cunning, indeed. The symptoms were described as about the same as those reported of the little girl mentioned above. In his case the penis had frequently been found erected, and continued to have that tendency until his vesical catarrh and frequent micturition were relieved.

The causes of masturbation, no matter whether considered as an acquired habit or a disease, are very various indeed. I have positive knowledge of cases in which the habit was contracted by the treatment of infants, both male and female, at the hands of nurses or servants. The pleasurable sensation experienced by the victim, on the genital organs being gently tickled and

excited, and when unruly, their greater manageableness resulting therefrom, caused a morbid desire leading to onanism in its most violent form. Protracted gentle rubbing, or beating of the glutæal regions in infants, as also in later years (6 to 10), of riding on horseback, I have seen followed by erection of the penis and orgastic excitement. Pressure of the parts and high temperature are injurious. Thus act feather-beds and soft furniture; thus also warm and heavy first pantaloons, the delight of the boy and pride of the mother. They may prove hurtful from more than one cause. Not only are the parts kept too hot and are sometimes compressed, but the frequent micturition of the child necessitates the frequent and protracted handling of the penis. The young child is but clumsy and the reverse of adroit. It takes him time to disentangle the organ. Frequently in the streets and gardens have I seen sympathizing little friends, mostly of the other sex, and then somewhat older, or servants, busy with rendering the required aid in the emission of the urine. The good habit of washing young children in cold water is not always unattended with a certain degree of danger. There are some which are unduly excited by it at bedtime. In adults I have frequently observed, that, while cold washing of the whole body—genital organs included—would be attended with good results in the morning, it—or the cold shower-baths—just before going to bed would lead to excitement and nocturnal emissions. This observation has induced me to pay some attention to the possible ill effect of the same dietetic treatment, in the evening, in the cases of such children who were known as, or suspected of, being addicted to the morbid habit. Local irritation of the genito-urinary organs is amongst the most common causes of masturbation. Most of their morbid processes have amongst their principal symptoms peripheral hyperæsthesia, or pain in the glans penis, which, like many neuralgic affections, are partly relieved by handling or pressing, and thereby constitute the possibility of contracting a habit. Nor are affections in those organs rare. One of the first affections of the newly born is an anomaly of the kidney. The uric infarctus of the first few weeks is a fertile source of gravel or stone, both in the kidneys or bladder, and of nephritis. In fact the large majority of vesical calculi—not at all rare in the young—were renal first, and descended with, or without, accompanying symp-

toms from the renal pelvis. In six out of forty necropsies of children under a year, made in a certain period in the same public institution, I found renal calculi. Although this figure cannot by far be taken as anything like a true proportion, it proves, nevertheless, that stone in children quite young is not rare at all. Besides, the experience of specialists has always proven that the histories of vesical calculi date in many cases far back into early childhood. Nor is gravel by any means very rare. Many of the hard screaming spells of babies, so willingly attributed to flatulency, naughtiness, or "teething," find on close examination their easy explanation in the condition of the urine. Catarrh of the bladder is a very frequent affection; even a number of cases of incontinence of urine take their origin from that condition of the mucous membrane, with its subsequent effect upon the nerve distributions. Sometimes it is itself the progenitor of a ureteric or renal catarrh; more frequently, particularly in girls, it is the effect of a catarrh of the external parts. For leucorrhœa—from a number of causes—is a very frequent affection. In the very young, the presence of hardened vernix in the vagina and cervix, in the somewhat older, of decomposed urine, or foreign bodies, or exposure, or an accidental abrasion, result in a catarrh of the vagina, with all its harmful privileges upon the condition of neighboring mucous membranes and nerves. Generally, long duration makes it a disagreeable and uncomfortable affection, both in itself and its possible consequences. Urethral catarrh in the young male is rare, but balanitis and balanoposthitis are very frequent, and ready causes of irritation. Their sources are both evident and numerous. The prepuce is long and frequently narrow. It need not even be very long, but still its lower blade and the surface of the glans penis are apt to be moist with fresh or ammoniacal urine. When it is narrow, the facilities for that discomfort are the greater; when it is very much so, the prepuce will often be pouched out during the emission of the urine, and micturition be effected drop by drop. The sebaceous follicles of the inside of the prepuce are very large—as they are all over the embryo and very young infant—and smegma very copious indeed. Thus its decomposition and the formation of irritating fat-acids are but the matter of a short time. If I add to all this the sometimes irregular attachment of the pre-

puce to the glans, with the formation of local pouches for smegma or urine, the number of possible or probable injuries appears large enough, without my believing in the alleged occurrence of severe nerve disorders depending on the sole presence of the embryonic or infant phimosis or epithelial conglutination of glans penis and prepuce.

The intimate correlation of the branches of the pudendal plexus (n. hæmorrhoidalis med. and inf. for bladder, vagina, musc. levator and sphincter ani ext. and int.; and n. pudendus for the pelvic cavity, with n. perinæalis for perinæum and mm. transversi penis, bulbo-cavernos, sph. ani. ext., scrotum, labia majora and vestibulum vaginæ—and n. penis dorsalis for penis and clitoris) explains why abnormal conditions of the lower portion of the intestinal tract are amongst the frequent causes of genito-urinary irritation. The frequency of this connection is well known to those who have to deal with affections of the rectum or prostata in the adult. In the child the intestinal irritation is mostly of two kinds, consisting either in the presence of worms (often ascaris, more frequently oxyuris), or constipation, the frequent cause of seminal emissions in the predisposed adult. In regard to the effect of constipation, it matters not whether it be produced by incompatible food, or rhachitical insufficiency of the muscular layer, or by the inflections of the (in the embryo and young infant) normally elongated and curved colon descendens. In all of these cases the effect upon the neighboring organs, particularly the nerves, is the same, and irritation of the glans penis can sometimes be explained by no better cause; for fissure of the anus, although not impossible, and sometimes met with, is rare.

The conditions of the urine, with its constant and direct effect upon the nerves of the urinary organs, ought not to be lost sight of in this connection; of the effect of stone, gravel, and mucus I spoke above. The changes taking place in consequence of improper food or medicines are no less important. Large quantities of meat, eggs, spice, salt, beer, are injurious. Cantharides and other irritants ought to be avoided or carefully handled. Alkaline salts are by no means indifferent. Most of them irritate the kidneys, some dangerously so in certain cases. Nitrate and chlorate of potassa and soda belong to that class, emphatically. Fatal cases of overdoses of the chlorates do not

appear in the latest text-books on materia medica and therapeutics, nor have I met with any in the journals. While, then, postponing the elaborate communication of such cases as not belonging here, I shall but say that they exist. Congestion of the kidneys with over-secretion I have observed frequently, nephritis with fatal termination once, and am cognizant of more cases. I believe I am justified, perhaps, in my impression, that the frequency with which kidney diseases in children have come to my knowledge during the last ten years may have its source in the indiscriminate use of the chlorates—amongst the public—for catarrhal and diphtheritic affections of the pharynx.

To sum up, I should say that all causes resulting in direct or indirect irritation of the nerves of the genito-urinary organs are apt to give rise to masturbation in the young. It is understood that I do not speak of the large class of cases occurring amongst school children and the inmates of institutions. From many of them the same tale is told of the prevalence of the dangerous habit amongst the children.

The treatment of infants and children affected with the morbid tendency is indicated by its causes. No uniformity exists in either. The nurse requires watching as well as the baby. Excessive phimosis, circumcision. Balanitis and balanoposthitis, cleanliness and astringents. Stones and gravel, mostly alkaline salts, the majority being uric in the beginning. Vesical catarrh, alkalies, tannin, cubebs, hyoscyamus, injections according to circumstances. Constipation, its appropriate treatment, dietetic, antirachitical, roborant, laxative (injections). Worms, anthelmintics. The acquired nervous derangement, bromide of ammonium or potassium. Anstie administers the bromide of potassium rather in "fierce activity of mind and body" than in the effects of masturbation. My observations as to its beneficial effects are more favorable, however. Lupulin and camphor have proved very serviceable in my hands. Regulations as to feeding are self-evident after I have given a list of substances which prove injurious. Regular bathing and constant occupation under careful supervision are urgent requisites. The children must not be permitted to sit on the floor too long. When the symptoms of an attack exhibit themselves, take them up, and occupy their body and mind. Force is often required. They must not remain in bed after waking up; in some cases I had

them taken up from their sleep every morning, and kept them awake all day, so as to secure sound and uninterrupted sleep all night. Infibulation, as advised by Celsus, might be replaced by an artificial sore of the surface of the penis. At all events, there are many cases which exert to the utmost both the watchfulness of the attendants and the ingenuity of the medical adviser.

Important amongst the therapeutical indications are those referring to the general influences produced upon the whole nervous system by the constant irritation of a large number of peripheric nerves. The symptoms of irritation are soothed and relieved by the above-mentioned sedatives; those of masturbation, and exhaustion resulting therefrom, by a general roborant treatment and nerve tonics, amongst which I place strychnia foremost, iron and arsenic next. The affections in which they are principally indicated, are neuroses, either of the nerve centres, such as epilepsy and chorea magna, or of a peripheric nerve, or a number of nerves, or nerve complexes. The form in which peripheric nerves are generally affected, is that of hyperæsthesia or neuralgia, terms which are not used as identical, because medical men have agreed to employ the latter, where the sensations are changed for a longer term, or where a positive lesion can be detected in the nerve itself.

Neuralgias are seldom treated of amongst the nervous diseases of infants and children, although the inherited element in the etiology of neuralgia, amongst adults, is acknowledged to be very powerful, indeed. Thus Anstie found twenty-four out of a hundred cases of neuralgia depending upon hereditary transmission. A number of causes resulting in neuralgias, it is true, are not found at the age of which I am here treating. Thus a number of lesions belonging to advanced age, such as atrophy, tumefaction, hyperæmic condition of the neuroglion, visible dilatation and elongation of the blood-vessels, cicatrices and indurations, tumors; the abuse of alcohol, of changing climates, of various traumatic and mechanical influences, are out of the question. Nor are the causes so much emphasized by Anstie, such as an excess in religious training, and compulsory employment of the mind with transcendental subjects, to be accused of interfering with the healthy development of the nerve-tissue of early childhood. But there are a large number

of young children, in whom a neuropathic disposition is well marked. Hereditary influences, acquired diseases of the bones so much more frequent in the young than in the old, and even irritation and exhaustion by masturbation, play an important part. If close observers, such as Valleix or Eulenburg, have but a small percentage of neuralgias amongst the young, it is because the class of patients they had to deal with were not of the mixed character yielding accurate and complete statistics. For cases of neuralgias are by no means rare; particularly hemicrania and spinal irritation are frequently met with.

Hemicrania is by no means rare. In girls and boys, particularly the former, I have often observed it. The variety which has been called angioparalytic, and depends upon, or is complicated with, enlargement of blood-vessels, may not be frequent. In fact I have seen but very few cases under ten years, in which that symptom required, and was benefited by, generous administration of ergot. But the angiospastic variety, with contracted blood-vessels, pale face, and generally neurotic appearance, is really frequent. It results from a number of causes. It is one of those forms of nerve trouble which is inherited perhaps as frequently as any other. Neurotic mothers, both thin and fat, are liable to transmit it to their young daughters. Congenital chlorosis, consisting in anomalous smallness of the arterial blood-vessels, is a frequent cause. Observation through many years of a permanent practice has yielded many cases, in which I followed children from early childhood to adult age. Their congenital condition resulted in nervousness and trigeminal neuralgia in the child, and chlorosis and "hysteria" in the young woman, with a bad prognosis until the climacteric years will put a partial end to the consecutive symptoms. Some cases were the result of anæmia and masturbation, some depended upon malaria, or slow convalescence from acute diseases, or protracted intestinal catarrh. But the worst and earliest cases I have seen resulted from masturbation. The children, both male and female, look anæmic, some thin, some bloated, are fretful, and changeable.

The attack of trigeminal (mostly supraorbital) neuralgia was sometimes unilateral, sometimes bilateral, and could last

for days, and amount to such agony in some instances, that the suspicion of cerebral disease was aroused. In a few cases the suppression of masturbation was the principal promoter of recovery. In others medicinal treatment proved effective, where the bad habit had resulted in a thorough lowering of the substance and function of the nerves. Iron administered for a long period, together with a roborant diet, belladonna in frequent and small doses, nitrite of amyl (inhaled during the attacks, as in the spastic hemicrania of adults; not internally, where I have found it absolutely inert) and protracted application of a mild galvanic current will prove successful. I should not leave this subject, however, without mentioning the effect of strychnia in speedily restoring the impaired nerve power, provided the doses are not too small, and the mode of administration the appropriate one. A child of five years ought not to take less than $\frac{1}{24}$th part of a grain in the course of a day, of either the sulphate or nitrate. Larger doses are frequently not only tolerated, but required. The best mode of its administration, however, is not by the mouth, but subcutaneous. A single daily dose of a twentieth part of a grain of the sulphate of strychnia in water will fully suffice.

Its beneficial effect upon the nerve-centres explains its power over the other form of neurosis not infrequently found in children—"spinal irritation," a term which for thirty years had an ontological existence in our vocabulary. After it had been given a bonâ-fide place amongst elementary ailments, modern medicine has ceased to look upon it as a unit. There are cases in which it is found to be due to a simple irradiation from cardialgia, others in which it depends on contagious and miasmatic diseases, typhoid and intermittent fevers; or on dyscrasic conditions, such as tuberculosis or scurvy; or on deficient sanguification, from anæmia, hydræmia, for smallness of arteries; or on venous obstruction superinduced by diseases of the lungs, heart, or abdomen, or on congestion of the spinal cord and surroundings depending upon improper innervation; or on anæmia of the spinal cord; or on a neuralgia of the skin, or muscle, or bones, or meninges. It is evident, from the long list of causes, that the cases of "spinal irritation" must be more frequent in the adult than in the young. But in these, this form of neuralgia

is by no means rare. Every cause tending to lower the status of the sensitive nerves of skin, muscle, spinous processes, or spinal meninges, will result in permanent hyperæsthesia, or local neuralgia. Where the presence of other causes of exhaustion in the child—such as enumerated above—can be excluded, the suspicion that the incompetency and faulty function of the sensitive nerves are due to masturbation, will frequently be well founded.

Neuroses of the joints have come under my observation a number of times in children of from five to twelve years, particularly in girls. I allude to the affection first described in Brodie's second edition, 1822, since by Stromeyer, in 1844, and by Esmarch. The majority of cases have been observed about the knee-joint, but the ankle-joint and the hip-joint are by no means free therefrom. The internal condyle of the os femoris, the styloid processus of the ulna, and the vertebral column, are also pet places. The same affection, however, has been observed in the sciatic, obturator, crural, peroneal, saphenous and tibial nerves, in the cervical, lumbar, hypogastric and sacral plexuses, also in many peripheric nerve branches distributed about the integuments, joints, periosteum and bones. In both of the latter, according to Luschka, sensitive nerves are very numerous indeed; thus they ought not to be lost sight of in the attempt at localizing the diagnosis.

A girl of eleven years, a patient of the German Dispensary some twelve years ago, applied to the surgical department for coxalgia. The pain was intense, the relative posture of the parts that of coxitis in the second stage, no change during day or night. The knocking of the knee against the hip-joint, said to be painless in "hysterical" coxalgia of the adult, was painful; thus the diagnosis was uncertain for weeks. A striking feature in the case, however, was the fact that the child was not emaciated, and no fever could be detected. Anæsthesia was required to solve the problem. Under chloroform the spasmodic contraction relaxed, no crepitation was felt, mobility complete. A general roborant treatment, with an occasional sedative, and compulsory exercise, restored the patient gradually, after months of patient treatment, and a year's useless suffering.

A little girl, nine years old, small and delicate for her age,

but never subject to any form of serious disease, has for half a year suffered from intense pain, occasionally of the knee-joints, more frequently of the ankle-joints, but mostly of the tarsus and metatarsus. The attacks were mostly of short duration, and but rarely brought to my notice until lately, when I was requested to attend to her rheumatism. She had complained for days from severe pain about both ankle-joints, and the metatarsus. Conversation and play moderated her complaint considerably; the thermometer did not rise above the normal standard in the rectum, slight pressure resulted in expressions of severe pain, continued pressure appeared rather to relieve than to increase the sensitiveness. Again, the diagnosis of a neurosis appeared more indicated than that of a rheumatic affection; again compulsory exercise, roborant treatment, both general and local, were resorted to, with success.

A similar case was that of a girl of fourteen years, who after a long walk up and down hill, through ice and snow, was taken with severe pain about the left hip-joint, which soon incapacitated her for the use of the left lower extremity. Her case appeared particularly difficult. She had been a sufferer from early childhood. From her third year she suffered from osteitis, resulting finally in cicatrices of the malar and superior maxillary bones of the left side, disfiguring her orbit; of the right radius, and the left os femoris below the trochanter. She was eleven years before she was permitted to walk. Since that time she throve, grew strong and hearty, and regularly menstruated before she completed her thirteenth year. In that respect she was never irregular afterwards. When the above symptoms of pain and immobility showed themselves, the diagnosis of coxitis, or pericoxitis, was made. Accordingly she was treated, principally, by rest, and her severe pain somewhat relieved, sometimes, by subcutaneous injections of morphia. In the course of time a variety of treatments were resorted to, every one without success. In this condition she had remained for a year and eight months, when I saw her. She was in the same bed in which she had been a year and a half before, was in constant pain, bore no touching about the hip-joint, or the anterior aspect of the thigh, from the ramus horizontalis downwards to the extent of three inches, tolerated no moving, was hardly ever relieved for any length of time by subcuta-

neous injections of morphia, showed no swelling of the trochanteric region, but a slight but well-marked elevation of the central portion of the ramus horizontalis ossis pubis, which was also met with on pressing the finger down into the pelvic cavity, and a few inches down the femur, in the median line. Some explorative punctures, in different depths, revealed nothing. The diagnosis appeared positive enough, in my mind; an osteitis of very slow progress explained all the symptoms. The absence of fever could be explained by the very slowness of the whole process. Still, it appeared somewhat peculiar that the general condition of the patient, then sixteen years old, was far from unsatisfactory. Her generalhealth, in fact, was good, and she was fleshy and rosy.

In connection with the case I may be permitted to state that the patient had been seen by a number of prominent medical men. She lived in a German University town. The professor of theory and practice, a gentleman of world-wide fame, agreed with me in the diagnosis of an osteitis. The professor of surgery, and a New York friend who left an enviable surgical reputation and practice in New York City to enjoy a scientific "otium cum dignitate" in Europe, pronounced in favor of a neurosis. Between the two opposite diagnoses the patient had the questionable benefit of doubt and wavering treatment. No change took place while she was under my observation; but I had scarcely returned home, when other symptoms developed, which turned the scale in favor of my surgical friends, such as tenesmus, irritation of the bladder, of irregular severity, duration, and alternation. Henceforth her recovery was a matter of time, endurance and patience. Internal remedies, external remedies, electricity, were exhausted. Compulsory exercise restored her. When she was to be removed from her place of sickness, she had to be carried on a stretcher for many miles to get to a railroad depot, reached her home hundreds of miles away, under excruciating pains, was compelled finally to sit, to stand, to walk, to take exercise; and improved gradually, but so slowly, that when, a year afterwards, she was sent to a foreign country for an entire change, she still walked with pain, limped, and got exhausted for many a long, weary month.

A girl of about eight years,[1] was under my treatment for a neuralgia of the right ulnar nerve, without fever or spinal complication. After some time a moderate swelling of the subcutaneous issue of the carpus, and in the neighborhood of the shoulder-joint, was added to her difficulties. They disappeared, only to be replaced by a very severe pain of the toes of her right foot. Her sufferings were intense for a long time; they appeared to be mitigated, when an œdematous swelling of her right foot made its appearance. A protracted tonic and galvanic treatment was required to restore her.

Another girl of five years was presented for acute rheumatism of the right shoulder-joint, which was said to have lasted several weeks, and to be very painful. There was excessive sensitiveness to the slightest touch, and some swelling. But it struck me that, since the commencement of the attack, neither the heart nor another joint were affected, that there was no fever, that deep pressure produced no more pain than superficial touch; that the pain extended as well over the thoracicus longus as the shoulder and upper arm; and finally, that the swelling was not exactly in the shoulder-joint, but above; nearer to, and to the rear of, the acromial end of the scapula. Thus my diagnosis was secured. I had to deal with a neuralgia of the cervical plexus, and not with "rheumatism."

In the same lecture from which I have just quoted, I alluded to the case of a boy of eight years, who had contracted a slight mitral incompetency while suffering from chorea, years previously. A year and a half ago he was attacked with rheumatism of both wrists, knees and ankle joints. A number of joints of the feet also took part in the process. There was moderate fever and distinct swelling of wrists, knees, and ankles. After some weeks his fever was gone, and the swelling very moderate indeed. Still, his complaints grew no less. He was taken with sudden attacks of excessive pain, which gave rise to screams and yells commencing about dark and continuing all night; was very sensitive, even in day-time, to the slightest touch, and exhibited such a disproportion between his objective and subjective symptoms that my suspicion was directed to

[1] A. Jacobi, "Acute Rheumatism in Infancy and Childhood," p. 28. A series of American Clinical Lectures, edited by E. C. Seguin, M.D., Vol. I., No. ii. p. 52.

other quarters than before. Then I recollected, that in periods of great mental anxiety, his father, many years ago, suffered from very severe and well-pronounced attacks of "hysterical" convulsions, and that his mother, a refined, intellectual, and neurotic woman, while subject to chronic oophoritis, had been disturbed by neuroses of both peripheric (mostly neuralgic) and cerebral character. My young patient had no more fever for some time, there was hardly any articular swelling left; he was quite comfortable at certain times, screamed fearfully —without tears—on the slightest touch on certain points, and became quiet, often, under protracted and deep pressure, particularly when his attention was diverted. The pain was not confined to the points most sensitive in sciatica, in fact there was no pain about the leg, joint, or the sciatic notch. A number of cutaneous branches of the crural nerves were affected, as also the ramifications spreading to the synovial membrane. At the same time, neither heart nor spinal cord participated in the process. If the original inflammation of the joint had anything to do with it, it had but been the source of irritation (in this case, perhaps, by a contiguous neuritic process?) in the sensitive nerves of both synovial membranes and skin. When, in accordance with the diagnosis of neurosis (neuralgia only, no vaso-motor complication being present) the treatment was changed to iron, galvanism, roborant diet, and warm bathing, the condition improved. But it took several months' absence from the city, and persistent exercise in a more genial climate, before recovery was complete.

The PNEUMOGASTRIC NERVE is frequently the seat of both irritative and paralytic neuroses in the adult. Of these, aphonia, so common in the "hysteria" of advanced years, I have never seen in the child. But the "hysterical" cough has often become a subject of observation. The first case I remember to have noticed sixteen years ago in dispensary practice. The patient was a boy of six years. A loud, hoarse, abrupt cough announced his entrance into the building; the absence of any change upon the mucous membrane of both the pharynx and larynx pointed to a neurotic origin of the affection. He never coughed in his sleep, but incessantly during the day, with but very short intermissions. Frequently his shoulders and the muscles of his face would participate in the convulsive process, with twitchings

and contortions. He had suffered for two months, and two more months of permanent treatment with arsenic and atropia —the galvanic current forming no part in my therapeutical resources at that early time—were required before a gradual improvement took place. Some years ago I observed the same neurotic cough in two children of the same family, one a boy of six, the other one of four years. It was most developed in the former. First, I was inclined to accuse the hyperæmic condition of the pharynx as the cause of the cough, the more so as the tonsils were congenitally enlarged, and had repeatedly been the seat of catarrhal and erysipelatous inflammation. But a successful local treatment of these affections had but a partial effect upon the cough. Protracted attacks would follow each other, and were but little influenced by sedative and roborant treatment. Not before the child was detected as being given to excessive masturbation, and the habit finally suppressed, did the treatment directed against the neurosis prove effective. In the younger patient masturbation was not detected; his cough, however, was less pronounced and obstinate. Evidently nervous irritability and imitation had a great deal to do with the affection in his case. It has struck me as singular, in my experience, that the large majority of these pneumogastric neuroses took place in male children, while the same affection when found in adolescent or adult age, was mostly found in the female.

Paralytic and paretic conditions of simply neurotic character are not very frequent in the young. The large majority of cases require the searching for a local, mostly central, origin. Still, neurotic paralysis will occur. A girl of nine years, coming home from school some afternoon, fell in front of her residence with an attack of general clonic convulsions. She was carried up stairs, the convulsion subsided, and a local paralysis took its place. Nearly the whole of the right motor oculi was paralyzed, the musc. obliquus superior alone being intact. Ptosis was complete, the right eye deviated outwards, the pupil was somewhat dilated, but responded to the light slowly. On the left side the rectus internus muscle was intact, and the pupillar branch was a little affected. The tongue deviated to the right. In this condition the child remained for weeks, until she gradually improved. After having been con-

sidered well for some time, another attack of general convulsions took place, and was again followed by the same symptoms. A number of weeks afterward she was presented to me with the above symptoms, exhibiting in addition the expression of general anæmia, and complaining of occasional headaches. After convincing myself of the absence of a central cause, and excluding everything except a merely functional disturbance, I promised to relieve her at once in such a manner that she was firmly impressed with the certainty of success. I pressed my thumb firmly upon her supraorbital nerve, and commanded her to open her eye. Her ptosis was instantly removed. She remained well for several weeks, when again she exhibited the same symptoms (this time without previous convulsions), and was relieved in the same manner. Meanwhile, a general roborant treatment was resorted to, with the final result of a favorable report concerning her permanent condition.

Another form of paralysis, of evidently neurotic character, resembles very much the spinal paralysis of the young, the so-called essential or infantile paralysis. It is apt to appear quite suddenly, and although not differing much from the latter in its symptoms, is more promising in its termination. It appears to result from a change in circulation of the spinal cord only; and such cases as have been observed, appear to point to the anterior horns as the principal seat of the affection. For sensation is generally less affected than motion. Nor is the effect of the affection so great as in myelitis or meningo-myelitis. For neither rectum nor bladder are affected as in general degenerative processes of the nerve centre, or in affections of the posterior horns only. Such affections bear a great similarity to what is known to take place sometimes after dysentery, typhoid fever, variola, or other serious infectious diseases. Subsequent paralyses have been claimed to be "functional," because, frequently, a number of symptoms which would result from universal disease of the spinal cord, are absent, with what justice, is hardly our province here to go into. Still we can point to the fact that, with the same reason, essential paralysis might be claimed as functional. In fact, so we did, before we knew better; the name of "dental paralysis" given to the "essential," speaks volumes for medical naïveté. A very few

cases of paraplegia in the adult, depending upon blood-vessel dilatation only, have been reported in the journals in the course of the last few years. They all refer to adults. Two cases, which first drew my attention to this class of paralysis, also occurred in adults. One was a young man of twenty odd years, who came with a recently and suddenly developed paraplegia to the German Hospital. His upper extremities were normal, his lower extremities heavy, paretic. Walking was almost impossible, the patient not being able to raise his feet from the ground. Sensation was but little affected, the sphincters active. Masturbation was freely admitted. No previous disease accused. Temperature was slightly raised, pressure on the lumbar portions of vertebral column but little painful. In his case I excluded a deep lesion of the spinal cord, and thought I ought to trace the affection to a momentary change in the circulation of the spinal cord or the meninges, anteriorly. In regard to that, it would make no difference in the facts (but perhaps in the indications for treatment) whether the cause of the dilatation of blood-vessels is sought in a paralysis of sympathetic fibres; or whether, as Goltz has it, the dilatation takes place through the action of spinal, vessel-dilating nerves, which come from the spinal cord and can be called into action by reflex, from other centripetal fibres. According to the diagnosis, galvanism and ergotin were freely used. The effect was remarkable, inasmuch as improvement took place soon, and recovery within a few months.

A second case was in the same hospital for some time when the other was admitted. The patient had been paralyzed some months before he was admitted. He had been in the ward before his condition was recognized as similar to the other patient, who came in with the affection recently started. The same treatment was resorted to, with marked benefit, though slower result.

The following is a case of neurosis, with its centre about the lower portion of the spinal column, in which the symptoms of both paresis and increased irritability were well-marked and coexisting. The former predominated, however. I look upon it as a case of vaso-motor neurosis (paralysis) with blood-vessel dilatation, the frequent changes being due to the very fact that the affection of the sympathetic nerve did not produce an

anatomic lesion, but a change in the hæmostatic and nutritive conditions. In point of fact, neuroses of the vaso-motor nerves are frequent in the young. It is but just that it should be so; for the physiological and pathological action of the sympathetic nervous system ought to go hand in hand with their early development. In embryonic life, the cells of the sympathetic nervous system develop prior to those of the cerebro-spinal system. Those enclosed in the nerve centres are earlier than those in the outlying organs. Those in the spinal cord precede those in the cerebrum. Those in the anterior horns are earlier than those in the other parts of the cord. In other words, the centres for circulation (and motion) precede the development of other centres. Let us add to these statements the fact that the nervous system is heavier, more extensive in proportion to the weight of the whole body, and the physiological necessity of greater irritability and nervous vulnerability in the young requires no further illustration.

Mary L. M. was 10½ years old in February, 1874, when her mother wrote as follows: "She began complaining some three or four years ago of stomach-ache, which at first we treated with home remedies, thinking it of little importance. When the pain increased, so as to torture her constantly, Dr. M. treated her a long time, but without success; and, at his advice, Dr. C. used electricity (electro-magnetism), very successfully. For about six or eight months she was quite well. Then the old difficulty returned, in the form of nausea, from which she has suffered almost constantly for a year and a half at least. During this time various remedies were used; she was removed from school, her diet and bowels were carefully watched. During the summer months, (1872) she was always in the country; and, last winter, (1872-1873), she was also sent off for a change. Electricity was again used, then galvanism, but unsuccessfully. In the middle of August, (1873) while in the country, she was taken with typhoid fever. During the fever she had no nausea; but as she convalesced it returned. Still, after some time, say for two or three weeks, she was apparently well. She was out again in mild weather during December, (1873) and January, (1874), taking exercise on a velocipede. Some over-fatigue caused its return, and some ten days ago she

was, in the night, taken with a general convulsion. Since then she has kept her bed, being constantly nauseated and very weak."

In February, 1874, I saw her. Her "weakness" was almost complete paraplegia. In fact, she had not left her bed for a fortnight, and her condition was not appreciated at all. She could move her whole extremities with a sudden swing, by an effort of her trunk, but neither the muscles of the thighs nor legs responded to the will, if will she had. There was some slight movement, however, of the toes. Reflex motility was but inconsiderable. Sensibility was not always disturbed. Sometimes both extremities, sometimes one, were hyperæsthetic; sometimes only certain, not always the same, territories. Now and then anæsthesia set in, but never over a large surface. Such anæsthetic surfaces, sometimes the size of a hand, sometimes larger or smaller, felt cold to the touch, and were frequently pale. Not always, however, would coldness of the surface and anæsthesia correspond. Sometimes, side by side with the cold or pale surface there was a circumscribed red spot, of the size of some square inches, to that of the hand, or larger, thoroughly hyperæmic. Such hyperæmia could, besides, be easily produced by gentle friction. When so produced, it would remain six or eight minutes, and gradually disappear. Frequently the whole limbs were bathed in perspiration, alternating with dry coolness. The perspiring surfaces felt usually cold, not always with a change in the natural color. Pressure over the limbs resulted in but moderate pain. Pressure over the spinous processes was but little painful, somewhat more so about half an inch each side of the median line, about the lower dorsal and upper lumbar vertebræ. Even this symptom, however, was not constant. There was moderate constipation, never a difficulty in emptying her bladder, the urine pale, sometimes copious and limpid. Temperature always normal, with the exception of the times of excessive perspiration, when it would fall below the normal. Other morbid symptoms were but rare. There was an occasional slight cough. The internal viscera were all in a normal condition. The child looked pale but not emaciate, was cheerful though whimsical, and appeared to enjoy her rest and the trouble she gave her attendants to a moderate degree.

Of diagnostic importance were the small number of tangible changes in proportion to the large number of symptoms, frequent alternations amongst the latter, the trifling and but occasional pain near the median vertebral line, the intact condition of the sphincter, and the absence of temperature elevations. The latter is particularly important. Changes in temperature are, in diseases of the nerve centres, mostly not in proportion to the dignity of the case. Destructive processes may run their full course without much fever. Therefore, the most careful observation is required to secure a differential diagnosis. And still, in many cases, the height of temperature, a difference of one or two degrees, is the only diagnostic sign between an "organic" (inflammatory, nutritive) and a functional or peripheric disease. Many a time have I secured a diagnosis by repeated measurements only, having no other guide. For obtaining correctness, the rectum alone, with its uniform temperature (at least in children, fœcal accumulations in the adult rectum permitting of possible mistakes) yields a positive result, which, as the difference to be found is probably but trifling in figure, though important in meaning, is urgently needed. For that reason I always measure the temperatures in the rectum, in questionable diseases of the nerve centres. Many a case of encephalitis or myelitis owed its diagnosis to the persistent elevation of perhaps one-half to one or two degrees.

Thus I fastened my diagnosis on a changed circulation rather than a nutritive alteration in the spinal cord, and took all of the symptoms for the result of a vaso-motor neurosis, on which partly temporary, partly obstinate dilatation of the blood-vessels were thought to be dependent. In consequence, the only treatment consisted, with trifling additions of occasional stimulants and nervina, in the administration of ergot, and the use of the galvanic, either ascending and descending spinal, or the peripheric current. Improvement began soon after the commencement of this course of treatment; it progressed steadily for months, until the child was out of bed and about. She was afterwards, without any further medical treatment, taken to Europe, and reports of a complete recovery were soon sent. She has been well since.

A boy of fourteen years was seen by me, two years ago, with Dr. Arcularius. His upper extremities were in a normal

condition, his lower ones paretic, and moved with a swing by an effort of his trunk, but he could stand when supported, both with open and closed eyes. His skin felt dry, was slightly anæsthetic, no neuralgia anywhere. His urine was normal, contained no albumen. His sphincters were active. No pain on pressure over his vertebral column. No increase of temperature. The history yielded a report of many years of assiduous masturbation. The diagnosis was the same as above, and a similar treatment adopted. Of the result I am not informed, as I did not see the patient afterwards, and the attending physician has since died.

A case of GRAVES' (Basedow's) DISEASE has lately been published by Fr. Chvostek (*Oester. Jahrb. f. Pädiatrik*, vi. 1875, p. 51.) It occurred in a girl of twelve years. This affection is but rare in children. Beside his own, Chvostek collected only four additional cases, one of Trousseau in a boy of fourteen, Solbrig in one of eight, Rosenberg in a girl of seven, Dusch in a child of between the third and fourth year. Thus, I have every reason to feel very much satisfied at having seen three cases in children myself.

Mary S., Bolton, Lake George, came under my observation in the summer of 1874, during my residence in the neighborhood of that village. She was then ten years old, and had suffered from her symptoms "for years." She was of average size, well developed, pale, intellectual; a good scholar, a poor eater. Now and then her face or her feet would swell. The functions of her rectum and bladder were normal. She complained of great weakness, could not walk without an effort, the heart would beat violently, and dyspnœa set in on slight exertion. The dulness over her heart was too extensive by one half, the shock perceptible to both hand and eye from the third to the sixth intercostal spaces. A loud systolic murmur was audible all over the chest, covering the diastole. It was of equal strength over mitral and aortic regions, and extended into the carotids. The radial pulse was feebler than normal. There was no history of any disease except malaria; no rheumatism. No swelling of the neck, no affection of the eye was noticed at that one visit she paid me; at all events, it must have been very slight, if it was present at all. Lungs were normal; nor could anything abnormal be discovered in her

abdominal viscera. Under the circumstances my diagnosis was that of a general chronic endocarditis, and the prognosis a very grave one. For a long time, during the following autumn and winter, she took iron and digitaline, and followed such dietetic rules as I saw fit to give. She called upon me again the day I left that part of the country, in the early part of September, 1875. To my astonishment she was better to all appearances in her general health than the previous year. She could walk better, and her appetite had improved. The local symptoms were the same everywhere. The size of the heart was perhaps a little less; the murmur as loud and extensive as last year. Besides, I noticed at once a slight protrusion and immobility of her eyeballs, a staring look, and somewhat swelled lower eyelids, and a considerable goître. The diagnosis was changed into that of Graves' disease, and the prognosis corrected accordingly. Three months she took tinct. ferri and digitalis, regularly, and when in January, 1876, I received her news, they were favorable.

Dr. Moller, of West 37th street, introduced to me a little patient of nine years, Louisa W., whom he had attended for several months, about six months ago. When presented to me she was greatly improved already. Still she was anæmic, and of small stature; smart, and a good scholar. The contractions of her heart were both visible and palpable over three intercostal spaces, the pulsations of both carotids unusually distinct. The systolic murmur was strong, and audible over the whole chest, both anteriorly and posteriorly. Her eyes did *not* protrude. The thyroid gland was slightly swollen on the left side; very much so, and protruding, on the right. It was not the first time, however, that I noticed a unilateral swelling of the thyroid gland in Graves' disease. She had steadily improved under the use of iron and digitaline (gr. 1-10th daily) and quinia, and roborant diet, and thus the treatment was continued. When I saw her four months afterwards, her general appearance was about normal—still the child was small—her eyes did not protrude, her goître was not visible to the left of the median line, and less marked than formerly, on the right; her heart's action was less impetuous, and the murmur less loud and less extensive. Of her complete recovery I entertained no doubt.

The third case is an exact counterpart of the one just mentioned. She was a patient of the clinic, and its records contain the few notes which were taken at her two visits. She was nine years, of average size, not remarkably anæmic. Heart loud and impetuous, systolic murmurs very strong and extensive, eyes not protruding, the right lobe of the thyroid considerably, the left but slightly swelled. Nothing was known about a previous disease, nor was any discoverable at the time of our examination. A similar treatment was resorted to, with what effect we had no means to ascertain since.

The neurotic origin of many SKIN DISEASES is established beyond doubt. Amongst them we count herpes zoster and urticaria. To the same class belongs pemphigus, in its rare acute form, with its hundreds of vesicles or bullæ filled with a thin alkaline fluid and surrounded by a red circle. I do not here allude to that form which is frequently seen upon the surface of the new-born; viz., a few bullæ spread over the whole body, and then of an innocent character; or on the palms of the hands or the soles of the feet, and then mostly of syphilitic origin. I allude only to that form, the existence of which is doubted by such an experienced observer as Hebra, who asserts never to have seen a case amongst a million of patients.

More than a year ago I was called to see a patient of Dr. Chabert's, in Hoboken. The little girl, four years old, was taken sick with a moderate fever, and exhibited a general redness of the whole surface the next day. On the third day the redness appeared in circumscribed territories, which were elevated, leaving between them portions of the skin of a more normal character. Although no symptoms belonging to the respiratory organs made their appearance, measles were suspected. On the fourth day a large number of the elevated territories exhibited a serous effusion raising the epidermis, the vesicles ranging between the sizes of a pin's head and that of a coffee bean. Accordingly, the diagnosis was changed into that of pemphigus. On the next day, the number of small vesicles was very limited, every one of them increased in size, and a number of them broke, either spontaneously, or in consequence of moving or scratching. On the evening of the sixth day I saw the child. She then had a temperature (rectal) of 105°, a pulse of 160, and a proportionate number of respirations

(44 to 46). She was on her back, moaning, delirious, wrapped in cotton, not an inch of the surface was normal. The epidermis was partly lost, in consequence of the effusions underneath, which were very copious, and the thrown-off integuments were washed or scratched off. In some places a number of bullæ were still intact, thus on the scalp; on others, square inches of surface were entirely denuded of epidermis; even hands and feet were raw and sore. Not before the following day did the sufferings of the child terminate with her death.

I could not but consider the sudden outbreaks of this peculiar form of dermatitis as the result of a neurosis. Was it a sudden attack, brought on by some poisonous influence, malaria, diphtheria, variola? There was neither a history of any of them in the child, nor in the immediate neighborhood. Was it but the final attack of a neurotic disposition in the patient, which had exhibited kin, but apparently unlike outbreaks before? I learned, on questioning, that the patient, now four years old, had suffered from extensive urticaria, which had tortured the little sufferer from birth. More than half the days of all her life she had been afflicted with this scourge. No dietetic care, no medical treatment had ever relieved or benefited her. Other sickness she never had, however. Urticaria, and frequent perspiration, such was the history of the infant and child, until she finally succumbed under the violent outbreak of the neurosis, which, while formerly confining its efforts to the production of local dermatitis of the lower strata, wound up with extensive superficial effusion. Where did it take its origin? There was a younger baby, two years old, in the family. He had "hives," but by no means so much, or so often, as the girl. The mother was free. The father was a sufferer from urticaria, almost constantly, for the last 1½ years, and found no relief. A younger brother of his had been affected with frequent and severe attacks of urticaria all his life.

A similar case, not so severe, because not fatal, has come to my notice, through the kindness of Dr. Assenheimer. The little girl is in her third year, had her first outbreak of acute pemphigus before she was a year old. The eruption was mostly spread over back, chest and abdomen, also over the thighs. Frequently, large portions of the surface were denuded of its

epidermis, the effusion being so copious, that the epidermis was washed off before scabs could form. When I saw her, the affection had lasted several months. Looking upon it as a vaso-motor neurosis, with dilatation of the blood-vessels and consecutive effusion, I advised—beside general attendance to the health of the child—the constant administration of quinine and ergotin. This treatment was followed by a speedy success. Not only did the bullæ dry up rapidly, but their reappearance ceased, and the patient did well for some time. After the treatment had been discontinued, a return took place. A few weeks ago I have again seen the patient, covered with pemphigus, less violent and extensive, but still with its old character and local severity.

The following is a case in which the neurotic symptoms were less localized:

Alice K. (patient of Dr. Guleke's), thirteen years old, not menstruated, was a bright and vigorous child, ambitious and studious. On the fourth of January, 1876, after a good night, she was taken with nausea and delirium, and two hours afterwards with general and bilateral convulsions, and loss of consciousness. During the attack the pupils were equal, somewhat dilated, but little responding to light. The tongue was bitten. In short intervals the convulsions returned for three or four hours, when finally they ceased, after the free inhalation of chloroform and the administration of turpentine injections. Soon after the convulsions, the urine contained albumen in small quantities; it disappeared next day, never to return. Temperature 102. Pulse not very frequent, could be estimated only during the attack. On the evening of the same day consciousness was somewhat restored. Pulse and temperature as above. On the next day the temperature remained the same; pulse became slower, sank gradually to 60, and was once observed to be but 48. Some (3d to 5th) cervical vertebræ became painful, after a while, on pressure. The child grew irritable, insisted on getting out of bed, to school, to the piano. Application of ice to the head, and the administration of chloral hydrate with bromide of potassium brought some relief. Temperature in rectum sank to 100°, and remained absolutely normal after a short time. Bromide of potassium was ordered, but irregularly taken. About the end of February

vomiting set in, not preceded by nausea or retching. Sleep was not good. The child grew more and more pale and irritable, disobedient, unmanageable, obstinate, with frequent local flushes about the face. Such was the condition in the middle of March, when I saw her. The slight elevation of temperature in the beginning, the vomiting, and perhaps also the slow, (not irregular) pulse at a certain period of the affection gave us the impression that possibly the process was one of irritation of the brain, perhaps produced by the presence of a tumor. The administration of bromide and iodide of potassium was advised. Three weeks afterwards the report was tolerably favorable. No new brain symptoms had developed. Pulse about 80, regular. Respiration normal. No sighing. No more vomiting. Temperature normal, with a difference between morning and evening of three-fifths of a degree. The emotional disturbances the same, perhaps worse. The child irritable, peevish, disobedient, with occasional unexplained or unprovoked circumscribed flushes about face and forehead. The sphincters acted normally through the whole time. I allow that the case admits of doubts concerning the diagnosis. But the principal reason for the diagnosis of a functional disturbance is certainly present, viz., the absence of symptoms necessitating the diagnosis of an anatomical lesion. Besides, the functional anomalies attending a general neurosis are so manifold and various, that I believe the case is not very doubtful. The very slight increase in temperature, in the beginning of the whole process, may be the accidental result only of a complication; or it may, like the slight albuminuria, depend on the circulatory stagnation attending and following the convulsion. If I am not greatly mistaken, the case is one of bonâ fide "hysteria." Morever, momentaneous increases in temperature may be found when circulation is disturbed. Local hyperæmia from a neurotic cause will raise the temperature. Even chronic nutritive diseases of originally the same character will admit changes of heat. Thus even in a few cases of unilateral hypertrophy (mostly described by Friedberg, Trelat, and Monod) an increase of from half a degree to two degrees has been observed from time to time.

After all, then, the neurotic impressibility known by the general term of "hysteria," which is still considered by many as

an attribute of the adolescent or adult female, is not confined to either the adult or the female. It is true that, in regard to the male sex, the term of hypochondriasis is preferred to that of hysteria, in those cases in which we have to deal with certain general, either moral or emotional, disturbances; but the recognized forms of "hysteria," such as laughing and crying spells, and convulsions, under the ordinary circumstances believed to form or cause, and usher in, hysterical attacks, are by no means unheard of amongst men. I have above alluded to the case of a gentleman, about thirty years old, who was always of a rather nervous temperament. While under constant mental strain, brought on by a chronic ailment of his eyes, which he was told would necessitate the removal of one of his eyes, he suffered from very frequent and intense hysterical convulsions, which returned for years, until the operation was performed; and after the moral shock attending the prospect of the operation and the operation itself was overcome, his attacks became more and more rare. Another male patient of mine, fifty-four years old, has frequent attacks of "nervousness," trembling, weakness about the "stomach," globus, and dizziness, which are always followed by the frequent and copious elimination of a limpid urine, for hours. The disease is more frequent in females, it is true. In them it has long been attributed—as its name shows—to some affection of the sexual organs. But it is an acknowledged fact, that it does not result from their acute affections, which ought to be expected to work more serious changes than chronic ones. On the other hand, many a case of "hysteria" is certainly not complicated with a demonstrable disease of the genital organs. In thirty-four cases of "hysteria" reported by Bernutz, nineteen were free of such complications; and finally, such cases as have been reported by Grisolle, and Castiaux, (*Gaz. hôp.* 1853, 1873,) prove that "hysteria" occurred with entire absence of both uterus and ovaries; not to speak of Charcot's case, in which a sclerosis of the lateral columns of the spinal cord formed the only etiological element.

Statistical reports prove further, that "hysteria" is found before either adolescence or adult age. Briquet states that twenty per cent. of his cases occurred in "children;" Amann collected sixteen of from eight to fifteen years in a total of two hundred and sixty-eight; Althaus, seventy-one out of eight hundred and

twenty below ten; Landouzy, forty-eight from the tenth to the fifteenth year, out of three hundred and fifty-one; Scanzoni, out of two hundred and seventeen, four below ten, and thirteen between ten and fifteen.

If the preceding statements prove anything, they demonstrate that the symptoms of "hysteria"—no matter whether they belong to motor or sensitive, sensorial or vaso-motor nerves—are found in all ages. This does not mean, however, that children will exhibit, as a rule, a number or all of the disturbances met with in the adult, or female, at the same time. In the majority of cases the neurosis is but local or circumscribed; but, when closely studied, of the well-known neurotic character. Now, if my readers should, after perusing these pages, come to the conclusion that the term of "hysteria" is an improper one, I shall be far from dissatisfied. It is but just that our nomenclature should gradually get rid of a number of terms which have but a clinical meaning of moderate convenience, and that we should substitute in their places anatomical and physiological diagnoses.

APPENDIX.

The following case of MASTURBATION IN AN INFANT was communicated to me by J. B. A., M.D.

April 1st, 1876.

DR. A. JACOBI.

MY DEAR DOCTOR:—I have delayed writing, that I might give you the result of treatment in the case of our little one, and also the history of the case, as promised. This I inclose, and hope it may prove of interest. The case is virtually ended, as she has not had a complete attack since we saw you, and adopted the measures suggested. Occasionally, while being held, she stiffens the limbs, but a separation of the thighs at once puts a stop to it all. She seems perfectly well, is eating and sleeping well, has gained in strength, and flesh, and color, and I do not see how she could be better. The constipation is entirely overcome by the change in diet. There is no evidence of any trouble with the kidneys or bladder. For a few weeks

we gave the cod-oil emulsion with the hypophosphites, but now she is not taking anything. I am very truly yours,

J. B. A.

CASE.

During the first nine months the child was perfectly healthy, and did not suffer from any of the ailments common to infancy. At this age teething commenced. It was not accompanied by pain or any constitutional disturbance, and has not been during the cutting of the nine teeth she now has at fourteen months. The first indications of nervous trouble were noticed about this time. They were very slight and occurred while the child was lying in its mother's lap. She suddenly became pale, had a peculiar dazed expression, and her attention could not readily be attracted. On being raised up and moved, she immediately became natural in looks and action. This was repeated a few times only, when the attacks changed in character. In addition to the appearance of the countenance already described, there was much muscular rigidity; the arms became quite stiff and strongly resisted being flexed, and the hands were clenched and the little fists firmly pressed into the iliac region on either side. At the same time the legs were strongly extended at right angles to the body, and there was a strong contraction of the abdominal muscles, and a straining as if at stool. If the child was held against one's breast she made strong pressure with the knees, and up and down movements of the body. After a short period, a moment or two, the respirations were quickened to a rapid panting, and perspiration started freely from the head and stood in drops about the mouth. The attacks often terminated in sleep. There was at no time any spasmodic or convulsive movement, or unconsciousness, or mental disturbance beyond an apparent abstraction.

The attacks came on irregularly; at times with intervals of some days, and, again, they were repeated many times a day, for several days in succession, and sometimes for two or three hours with but slight intermission. *They never came on during sleep*, but usually when the child was sitting on the lap, and occasionally when on the bed or floor. If she was placed on the floor early in the attack, and amused with her play-

things, it would frequently be broken up; if, however, she was held till it was fully developed, and then put down, she would lie upon her side, and the attack would progress as described.

During the whole period she suffered much from constipation and from successive attacks of bronchitis, which reduced her flesh and strength. For some weeks the bowels were moved only by injections or medicines. During this period, the nervous attacks were more frequent and severe. The condition of the child attracted the attention of all who saw her while suffering thus; and, of course, each one had a theory concerning the nature and cause of the attacks. By some they were attributed to the state of the bowels, but by far the greater number to the presence of worms. To exclude the possibility of this theory, *santonin* was given, without, however, producing any result. Some physicians considered the attacks of serious import, and urged the use of the bromides, and, though none expressed the opinion that they were of an epileptiform character, the inference was plainly to be deduced.

On watching the child closely, the conviction was forced upon my own mind that the power of habit was a strong element in the case, and I entertained the belief that, by improving the general health, and correcting the tendency to constipation, recovery would ensue. To this end she was given cod-oil emulsion and laxatives.[1]

It was at this time, and when the child was thirteen months old, that you saw her. Upon the adoption of your advice there was a wonderful change. The mother fully carried out your suggestions to separate the thighs, to remove the hands, and to amuse and attract the attention of the child. The habit was to be broken up at all hazards. Care and watchfulness have been crowned with complete success, and there is now scarcely a tendency toward the habit perceptible. A change of diet, in substituting for milk, a variety of food and of fruit, has corrected the condition of the bowels, and cod-oil emulsion, with the hypophosphites, aided by proper hygienic care, has improved the general health, and the child is now in good flesh and strength, well and happy.

[1] At the time of the infant's visit in New York, there was also a marked amount of mucus in the urine. If it continued, the administration of alkalies was recommended.